Offshore Inspection Findings (CG)

CAPT Joshua Reynolds

D8(ocs) Industry Day 26 August 2015

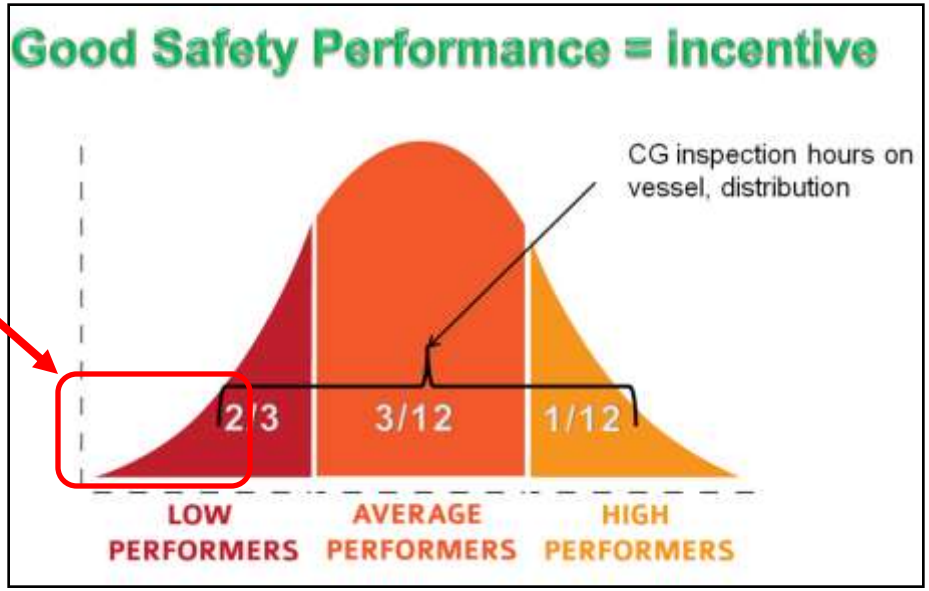
USCG Eighth District OCMI

Discussion Items up front

- **What identifies an OCS Drilling or Production Unit as a "poor performer"?**

- **What are OCMI considerations for operational restrictions following deficiencies?**

Regulator Focus



Relevant Regulations and Policy

33 CFR 140.101 “Inspections (by CG or BSEE)”

33 CFR 143.120 “Floating OCS Facilities”

33 CFR 143.207 “Requirements for Foreign MODUs”

Marine Safety Manual Volume II, COMDTINST M16000.7B, Section G, Chapter 3:

- Paragraph L “COC: Failure to Meet Requirements”
- Paragraph N.9 “Documentation of Foreign-Flagged MODU Exam Activities”;

Marine Safety Manual Volume II, COMDTINST M16000.7B, Section G, Chapter 4

Marine Safety Manual Volume II, COMDTINST M16000.7B, Section G, Chapter 5

Marine Safety Manual Volume II, COMDTINST M16000.7B, Section D: Port State Control

IMO Resolution A.1052(27), “Procedures for Port State Control”

L. COC: FAILURE TO MEET REQUIREMENTS

If at any time the OCMI determines the unit is NOT in compliance with the requirements for the purpose of obtaining a COC, regardless of the Option chosen, the Coast Guard may:

1. Withhold issuance of the original COC until the requirements are met;
2. Withhold issuance of a subsequent COC until the requirements are met;
3. Suspend an unexpired COC after a reinspection is initiated due to crew complaint or casualty investigation until requirements are met;
4. Revoke an unexpired COC after re-inspection if the unit operates without complying with Coast Guard orders to correct serious discrepancies or unlawful conditions; or
5. Initiate civil penalty procedures against the owner, operator, and/or person-in-charge if violations of 33 CFR 142.1 or other deficiencies remain uncorrected after official notification is given and a reasonable time for corrections expires.

The Coast Guard **cannot detain** a MODU on the OCS, but when deciding whether deficiencies warrant a MI to withhold or revoke a COC, use the IMO Procedures for Port State Control (Resolution A.787(19) as amended by resolution A.882(21)) as (Appendix 1) guidance. In all instances where the COC is revoked or withheld, The Bureau of Safety and Environmental Enforcement (BSEE) shall be notified by the Coast Guard.

COMDTINST 16000.7B

USCG Marine Safety Manual, Vol. II: Materiel Inspection

SECTION G: OUTER CONTINENTAL SHELF ACTIVTIES

CHAPTER 4: Procedures Applicable to Floating OCS Facilities

The authority to inspect all facilities on the OCS comes from the Outer Continental Lands Act (OCSLA), 43 U.S.C. 1333 (d) (1), 1348 (c) and 1356. The inspection and examination of these facilities is covered in the Memorandum of Agreement between the Bureau of Safety and Environmental Enforcement (BSEE), and the Coast Guard.

Once a facility meets the requirements found in this section, the cognizant OCMI will issue a Certificate of Inspection (COI) or a Certificate of Compliance (COC) to the facility depending on the documenting nation.

USCG Marine Safety Manual, Vol. II: Materiel Inspection

SECTION G: OUTER CONTINENTAL SHELF ACTIVTIES

CHAPTER 5: Procedures Applicable to Fixed OCS Facilities or Platforms

c. BSEE ensures compliance with the self-inspection program and conducts spot-check inspections on fixed OCS facilities. The Coast Guard will continue to conduct initial inspections on newly constructed fixed OCS facilities.

d. While BSEE is acting on behalf of the Coast Guard, there is nothing to prevent a Coast Guard inspector from conducting a spot check inspection on a fixed facility at any time or concurrently with other OCS inspection activities. MIs are encouraged to conduct such spot checks when conducting other activities in the vicinity of a fixed platform. The Coast Guard shall forward the results of all spot check inspections regardless of the findings the appropriate BSEE office.

e. If the Coast Guard issues a Vessel/Facility Inspection Requirements, Form CG-835, during a spot check inspection, the inspector shall ensure the owner/operator corrects the deficiency within a reasonable time frame (generally no more than 30 days).

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27th session
Agenda item 9

PROCEDURES FOR PORT STATE CONTROL, 2011

A 27/Res.1052
20 December 2011
Original: ENGLISH

3.1.1 In general, a ship is regarded as substandard if the hull, machinery, equipment or operational safety, is substantially below the standards required by the applicable conventions or if the crew is not in conformance with the safe manning document, owing to, inter alia:

.1 the absence of principal equipment or arrangement required by the conventions;

.2 non-compliance of equipment or arrangement with relevant specifications of the conventions;

.3 substantial deterioration of the ship or its equipment, for example, because of poor maintenance;

.4 insufficiency of operational proficiency, or unfamiliarity of essential operational procedures by the crew; and

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Areas under the SOLAS Convention

3 Failure of the proper operation of emergency generator, lighting, batteries and switches.

5 Absence, insufficient capacity or serious deterioration of personal life-saving appliances, survival craft and launching and recovery arrangements.

6 Absence, non-compliance or substantial deterioration to the extent that it cannot comply with its intended use of fire detection system, fire alarms, fire-fighting equipment, fixed fire-extinguishing installation, ventilation valves, fire dampers, and quick-closing devices.

8 Absence, non-compliance or serious deterioration of lights, shapes or sound signals.

8.2 If the PSCO determines that the crew are unfamiliar with their duties or incapable of safely operating the life-saving and fire-fighting equipment, the PSCO should halt the drill, notify the master that the drill was unsuccessful and use their professional judgement to establish the next steps, noting the likelihood that this will establish "clear grounds" for a more detailed inspection.

Areas under the Load Lines Convention

4 Absence, substantial deterioration or defective closing devices, hatch closing arrangements and watertight/weathertight doors.

CHAPTER 2: PROCEDURES APPLICABLE TO EXERCISING CONTROL OVER FOREIGN VESSELS UNDER US JURISDICTION

11. International Safety Management (ISM) Code

b. If the OCMI discovers major non-conformities exist with the vessel's SMS, such as a deviation from SMS requirements that poses a serious and direct threat to personnel or ship safety, evidence that the ship is not taking corrective action for long-standing non-conformities per preventative maintenance processes in the SMS, or evidence the company has failed to address outstanding non-conformities reported by the ship, the OCMI may consider the vessel for detention. To do so the OCMI must articulate the specific deficiencies of the failed SMS.

Statistical Overview

VESSEL Inspection Deficiencies	Sector Corpus Christi	Marine Safety Unit Port Arthur	Marine Safety Unit Texas City	Marine Safety Unit Morgan City	Sector New Orleans	Sector Mobile
CY 2014	3	6	4	272	97	12
CY 2015	0	0	6	82	3	0
2014 -2015	**3**	**6**	**10**	**354**	**100**	**12**

FACILITY Inspection Deficiencies	Marine Safety Unit Port Arthur	Marine Safety Unit Texas City	Marine Safety Unit Morgan City	Sector New Orleans
CY 2014	4	1	14	4
CY 2015	0	0	5	0
2014 -2015	**4**	**1**	**19**	**4**

Number of Activities (Minus Duplicates)

	2014	2015
MODU	351 (211)	158 (72)
Floating	216 (128)	94 (77)
Fixed	45	45

Regulator Focus

Number of Activities With 5 or More Deficiencies

	2014	2015
MODU	27 (12.8%)	8
FPS	4 (3.1%)	2
Fixed	3 (6%)	1

Inspection Highlights

Jack Up MODU inspection conducted by 3 CG Inspectors. Deficiencies:

- Lifeboats #1 and #2 are lapse in the annual inspection. Last inspection was complete 12/10/2013.

- Emergency Generator Engine shutdown while under load and would not restart due to a faulty governor control solenoid.

- Several doors in stairway would not close. Provide report stating doors have been repaired.

- #2 Lifeboat had leaking hydraulic seal. Hydraulic system is the primary means of starting. Each lifesaving appliance must be in good working order at all times when unit is operational. Replace leaking seal.

- Ladders on legs are covered in barnacle growth inhibiting escape route. Recondition ladders to allow for easy escape.

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Inspection Highlights

Drillship MODU inspection conducted by 4 CG Inspectors. Deficiencies:

- Escape routes should be provided to the satisfaction of the administration. Machinery space escape route on main deck are very difficult to open due to old spring mechanism. Replace/repair to original condition.

- Missing structural fire protection in lower aft starboard pump room. Replace/Repair to original condition.

- DP simulator room has open electrical panels to pose a shock hazard to personnel. Repair to original condition. Also marine cable transits need to be one color in the DP simulator room.

- DP lights in ECR space are inoperable. Replace/repair to original condition.

- Internal combustion engines of greater than or equal to 2250 KW or having greater than a 300mm bore diameter should be provided with crank case oil mist detectors. Oil mist detector on generator #1 was not working. Fix oil mist detector to original condition.

- EPIRB registration is missing onboard. Provide scanned copy of registration.

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Inspection Highlights

Semi MODU inspection conducted by 3 CG Inspectors. Deficiencies:

Dead end conductors in switchboard room not terminated

Bilge Suction inoperable-Pontoons

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Cable penetrations missing in watertight boundary

Escape routes blocked by newly-installed pipe

Inspection Highlights

Jack-up MODU inspection conducted by 4 CG Inspectors. Deficiencies:

- #2 lifeboat's water spray system was inoperable when lifeboat was launched.
- Lifeboat #2's air bottles were below 1000 psi. Air supply is not sufficient to meet regulatory requirement.
- During overspeed test, lube oil lines on #5 and #2 generators failed, releasing lube oil. Replace all non-metallic hoses for fuel oil systems on all 6 generators onboard to satisfaction of class society and manufacturer specifications.
- Multi-cable transit in galley external bulkhead does not maintain A class boundary. Reinstall in accordance with manufacturer's instructions and FTP Code.
- Secondary means to start EDG missing. Provide secondary means to start EDG for three starts within 30 mins.

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Inspection Highlights

Drillship MODU inspection conducted by 3 CG Inspectors. Deficiencies:

- Cable wire pulls to operate the davit in order to horizontally extend the lifeboat out of its stowed position and to lower each while inside of the lifeboat capsule are out of commission. Replace/repair to operate properly from within the capsule.

- Falls for the lifeboat do not lay evenly on the vertical drum. This is an issue for all of the lifeboat davit systems. Repair/replace falls to original condition by OER. Provide proof of service report.

- Forward lifeboat illumination lights are supposed to illuminate towards the water where the lifeboat will be launched. Lifeboat numbers one and two illumination lights do not shine toward the water. Ensure that the emergency lighting for these lifeboats illuminates towards the water.

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- Forward hatch on the lifeboats have multiple interior and exterior cracks. All around the same location for each lifeboat hatch. Repair to original condition (crew was aware of some of the cracks and was already addressing the issue).

- Spider cracks were found on the weld of the maintenance pennant eyelets for the lifeboats. Replace/repair to original condition by OEM.

Inspection Highlights

Fixed Facility inspection conducted by 3 CG Inspectors. Conducted security audit with the facility supervisor. Deficiencies

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- Facility security plan does not designate what areas onboard facility are restricted areas. Amend plan to designate areas onboard that are restricted.
- Facility security plan does not have procedures for Declarations of Security. Amend security plan to to contain procedures in accordance with regulations.
- Facilities fog signal does not operate in automatic mode as designed. Facility does not have a live watch at night. Repair/renew fog signal to original condition.

Inspection Highlights

Fixed Facility inspection conducted by 4 CG Inspectors. Deficiencies:

- **Circuit breaker panel in galley has duct tape covering open slots in the face of the panel. Repair with proper blanking plate.**
- **Gate leading to +10 deck frozen and inoperable. Repair to original configuration.**
- **Annual security audit overdue. Conduct required audit.**
- **Severe wastage on grating leading to water on +10 deck. Repair to original configuration.**
- **Several extinguishers have been identified as needing maintenance.**
- **Repair all wasted/worn extinguishers as identified by yellow tag.**
- **Line on ring buoy is damaged. Replace with new unit.**
- **Ensure all life rings have retroreflective tape.**
- **Emergency escape hatch needs to close and prevent access from intruders.**
- **Ensure all life floats have retroreflective tape.**

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Inspection Highlights

Floating Facility (Spar) inspection conducted by 3 CG Inspectors. Deficiencies:

- Large concrete patch on the base of an entry hatch. Remove patch & repair according to construction portfolio.
- Found cracks in both crane windshields.
- Emergency Evacuation Plan approval letter not on board. Provide copy of letter.
- Emergency Generator's local start function is in-op. Repair to original configuration.
- Gear adrift in lifeboats is taking up seating space. Relocate gear so as to not impede seating arrangement.
- Exhaust leaks at emergency generator. Repair leaks.

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Inspection Highlights

Floating Facility (TLP) inspection conducted by 3 CG Inspectors. Deficiencies:

- Conductors in hazardous areas were deteriorating in outer jackets, armor. Inner jacket condition unknown.

BSEE SEMS?

Inspection Highlights

Jack Up MODU inspection conducted by 3 CG Inspectors.
Deficiencies:

- Electrical standpipe (conduit) in shaker space wasted at deck. Replace with new standpipe with class 1 division 2 stuffing tube.
- Cable transit blocks missing on bulkhead between pump room and sewage room. Ensure blocks are installed IAW manufacturer instructions.
- #1 generator exhaust bulkhead penetration wasted. Make permanent repairs to bulkhead penetration.
- #1 lifeboat self contained air support system air regulator not working properly. Replace with new regulator.
- Pressure vessels not stamped IAW ASME boiler and pressure vessel code. Provide proof that pressure vessels are constructed to code.

Inspection Highlights

Floating Facility (TLP) inspection conducted by 3 CG Inspectors.
Deficiencies:

- Emergency generator failed to start and maintain the emergency load due to leaking check valve in the fuel system which is causing the generator to over speed upon starting.
- Holes were found in the containment area for both fire pumps around each pump.
- Life boats #1 and #3 deluge valve is seized open. All valves shall be repaired or replaced and maintained at all times to ensure ease of activation.
- Life boat #1 davit brake accumulator is bleeding down which inhibits the launching of life boat #1. Davit to be inspected by 3rd party lifesaving to diagnose and repair problem.
- Found multiple wires not terminated on drill floor. Found cable penetrations not properly sealed off on drill floor. Complete a survey of drill floor and identify and remove all cables and wires that are not properly terminated. Repair cable penetration going to electrical space on drill floor. Drill floor was not currently being used and under construction.

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Inspection Highlights

MODU Class WI Vessel inspection conducted by 4 CG Inspectors. Deficiencies:

- The aft winch limit switch for Lifeboat 4 was found to be inoperable. Repair/replace the same and prove proper operation.
- Ladders were found to be blocking access to Liferafts 5 & 7. Remove the same and ensure that emergency gear is accessible at all times.
- The left pilot cylinder discharge hose on the main CO2 panel is of insufficient length, causing a kink in the hose, and is beginning to crack. Provide proof hose is safe to operate as designed or replace in accordance with manufacturer instruction.
- Vessel had numerous areas where electrical cables were supported with plastic wire ties, not restrained in cable trays and/or not bunched and laid in cable trays as required. Repair to the satisfaction of the attending marine inspector.
- Vessel had multiple areas where the structural fire protection was removed or damaged. Repair or reinstall structural fire protection to original.
- Vessel's lint removal ducting from laundry was damaged and releasing lint into void space causing a fire hazard. Clean void space, repair ducting and create preventative maintenance to inspect void periodically.

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Inspection Highlights

MODU Class Well Intervention Vessel inspection conducted by 4 CG Inspectors. (Continued)

- Cathodic protection unit shows faults in system. Provide proof system has been tested and is working properly.
- Approval/data plates for ALL lifeboat davits and both aft lifeboat winches are missing.
- Vessel conducted tabletop discussions as drills. In accordance with cite, drills are to test response to security threats. Vessel must conduct security drill as soon as practicable.
- Numerous fire doors were found to not fully close due to ventilation imbalances. Properly adjust fire doors throughout the MODU to ensure proper operation, regardless of which A/C units are in operation.
- Vessel presented scenario used for annual exercise. Scenario was actual event that tested vessel's security plan vice the comprehensive scenario required by regulations. Vessel must conduct an annual exercise to meet the regulations.
- Self contained air system for Lifeboat 2 was found to be well below minimum required pressures. Refill to 20MPa per manufacturer's requirements.
- The emergency/backup starting battery for Lifeboat 2 was found to be in a failing state. Recharge and load test/prove or replace the same. Noted new battery was on order.

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Offshore Inspection Findings (CG)

CAPT Joshua Reynolds

D8(ocs) Industry Day 26 August 2015

USCG Eighth District OCMI